

FIG. 1

09604595.062700

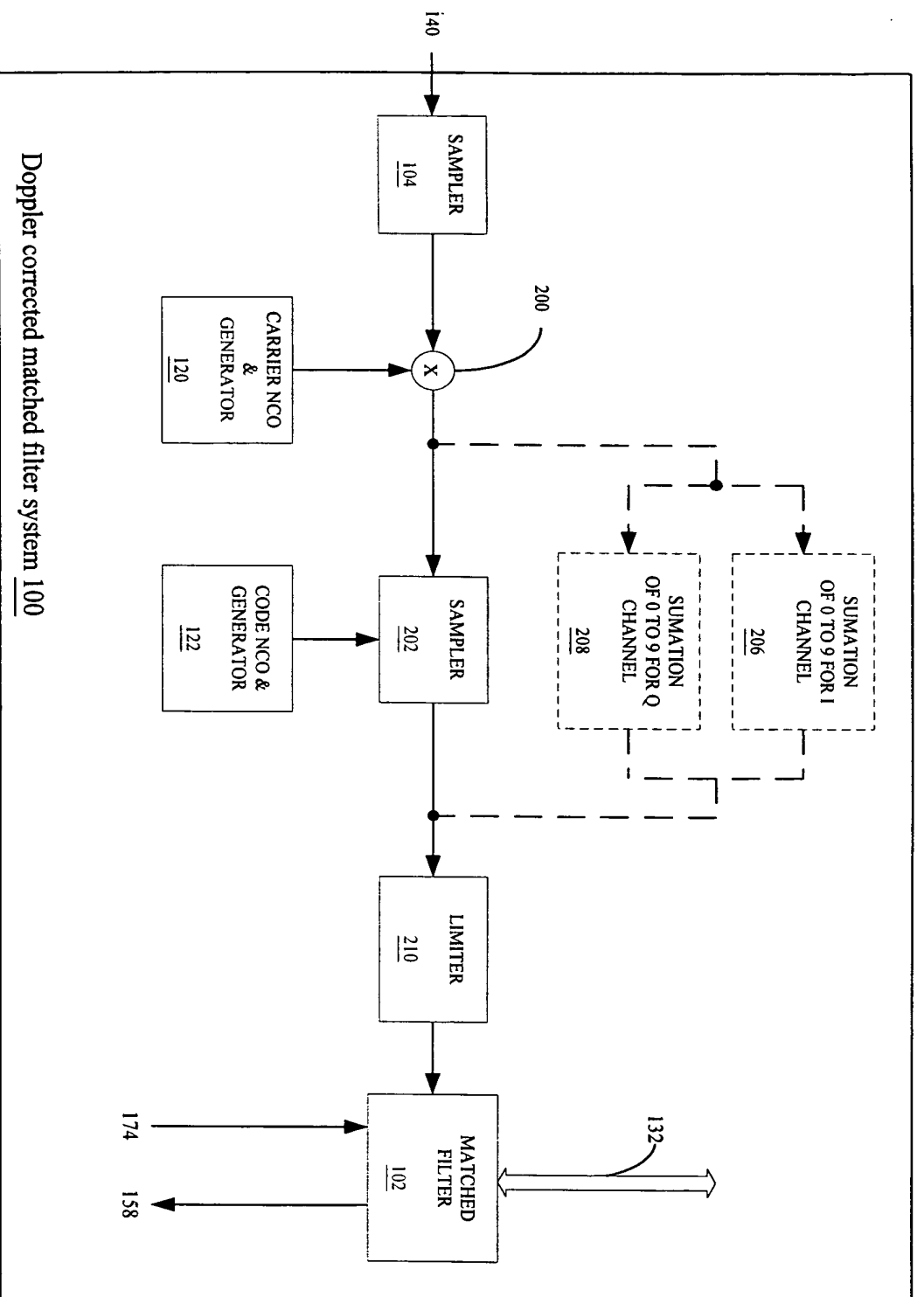


FIG. 2

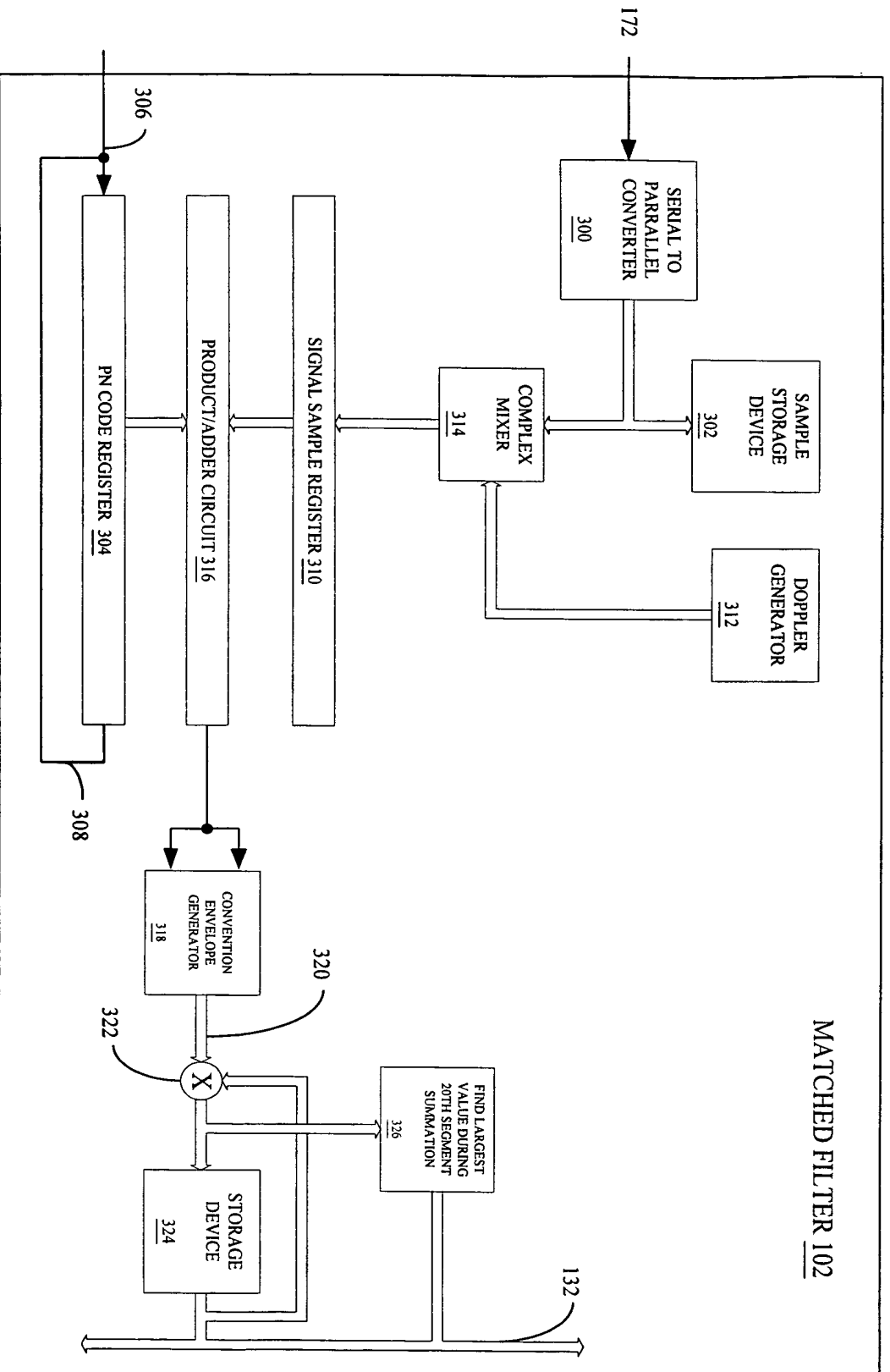
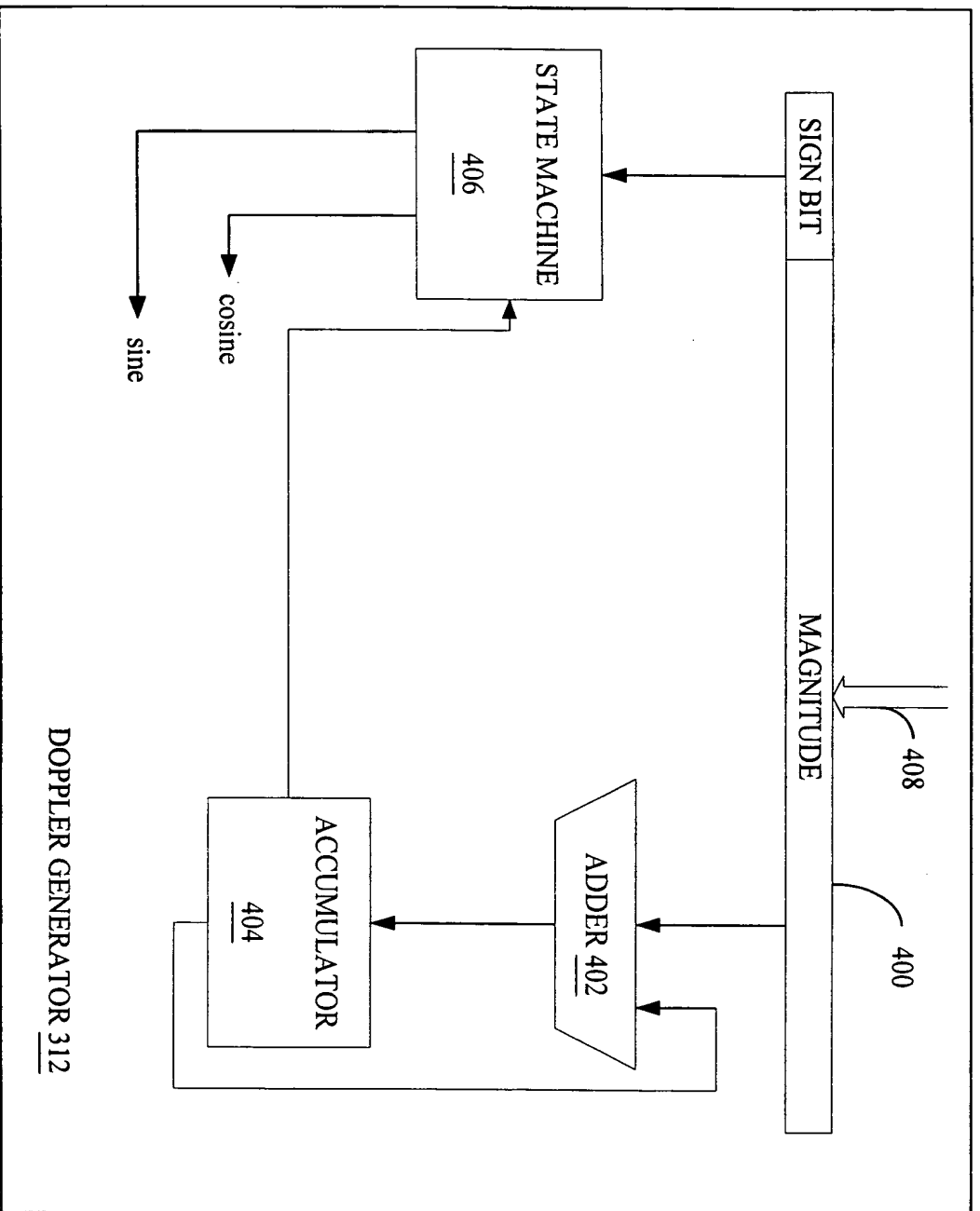


FIG. 3



DOPPLER GENERATOR 312

FIG. 4

002290" 55540960

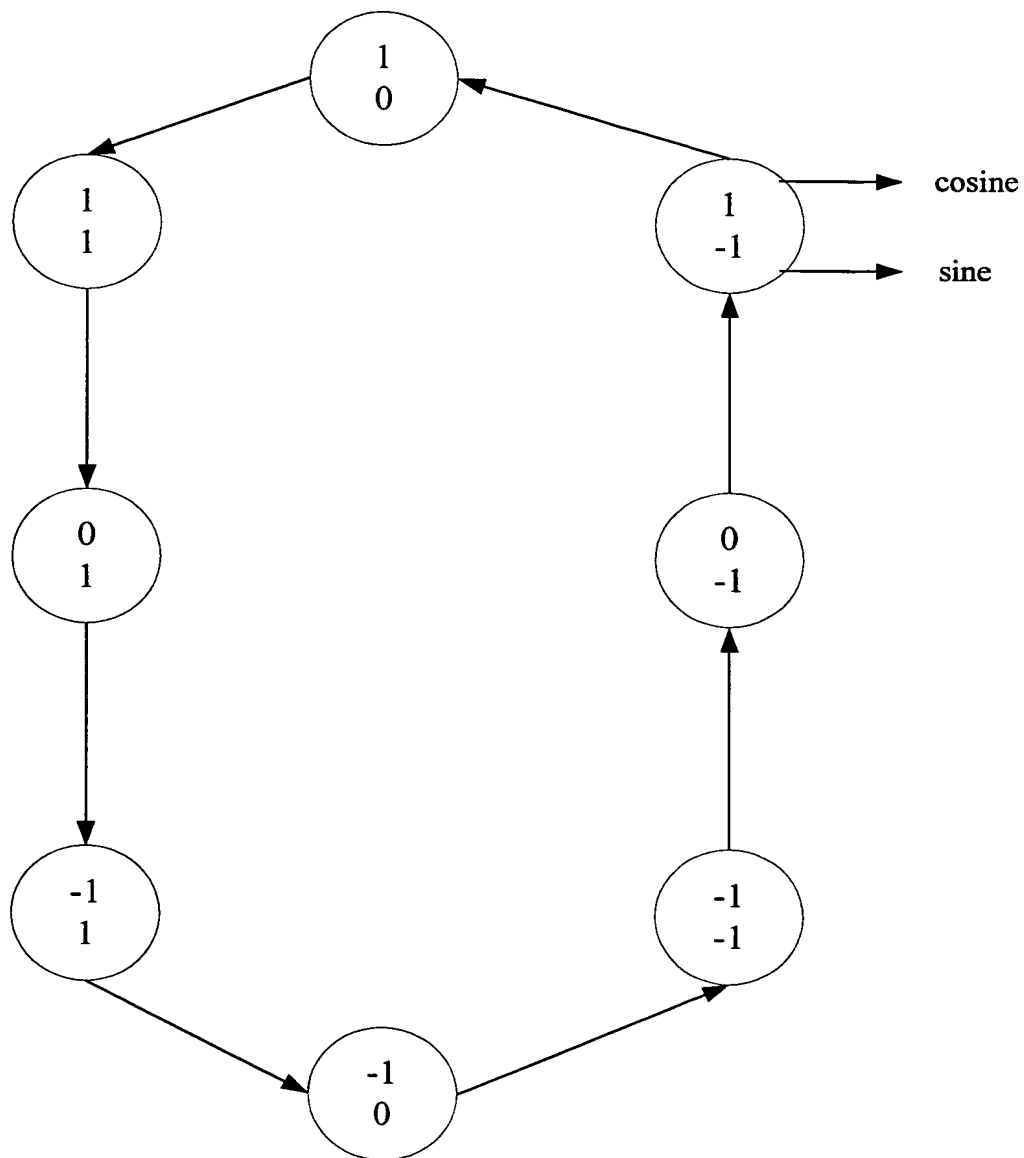


FIG. 5

0040459 106700

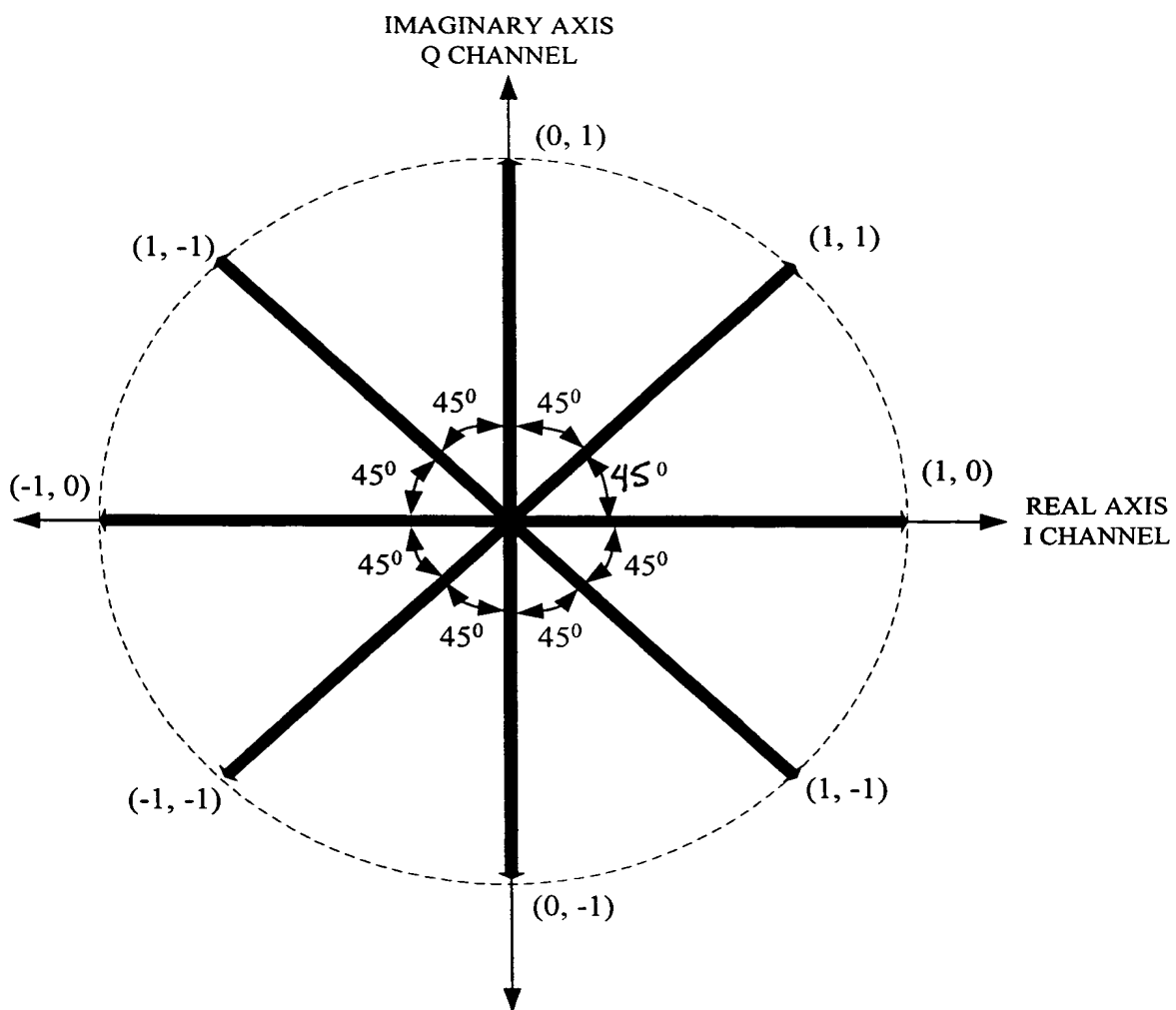


FIG. 6

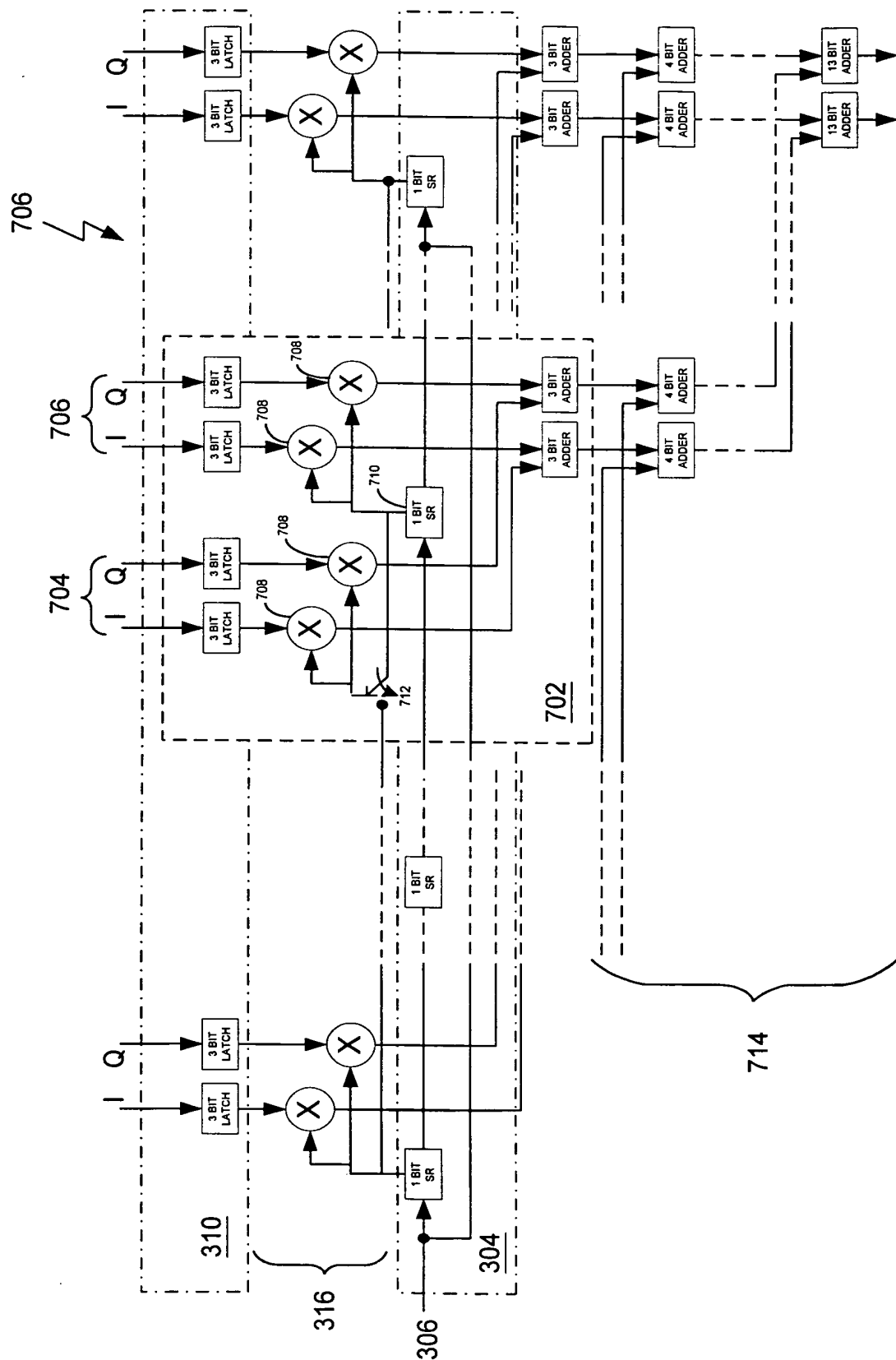


FIG. 7

800

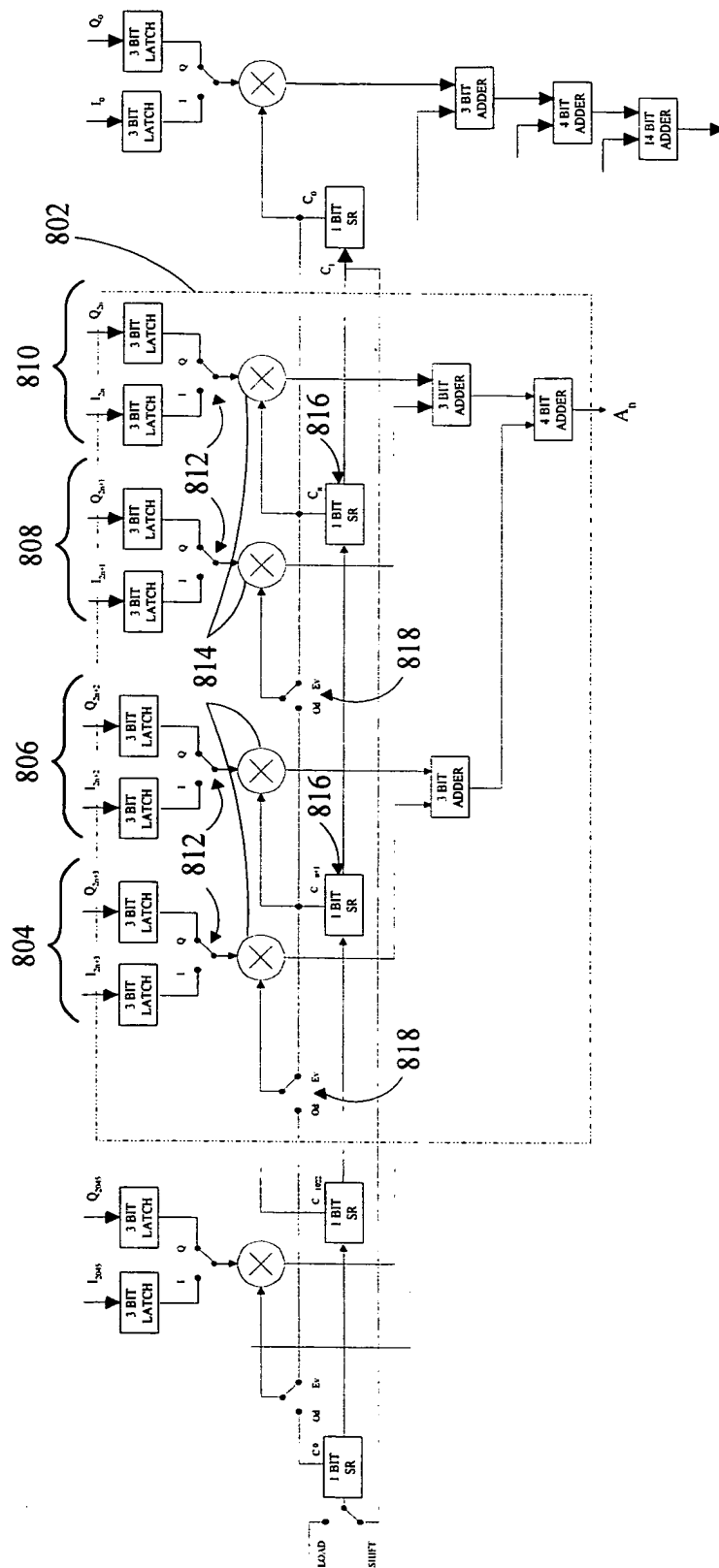


FIG. 8

1010 Row	1004 C	1006 Switches	1002 A_n in FIG. 8	1000 A_n in FIG. 9	1008 Sum of Rows
1	C_n	EQ	$C_n Q_{2n} + C_n Q_{2n+1} + C_{n+1} Q_{2n+2} + C_{n+1} Q_{2n+3}$	$C_n Q_{2n} + C_{n+1} Q_{2n+2}$	1 + 3
2	C_n	EI	$C_n I_{2n} + C_n I_{2n+1} + C_{n+1} I_{2n+2} + C_{n+1} I_{2n+3}$	$C_n I_{2n} + C_{n+1} I_{2n+2}$	2 + 4
3	C_n	OQ	$C_n Q_{2n} + C_{n+1} Q_{2n+1} + C_{n+1} Q_{2n+2} + C_{n+2} Q_{2n+3}$	$C_n Q_{2n+1} + C_{n+1} Q_{2n+3}$	1 + 7
4	C_n	OI	$C_n I_{2n} + C_{n+1} I_{2n+1} + C_{n+1} I_{2n+2} + C_{n+2} I_{2n+3}$	$C_n I_{2n+1} + C_{n+1} I_{2n+3}$	2 + 8
5	C_{n+1}	EQ	$C_{n+1} Q_{2n} + C_{n+1} Q_{2n+1} + C_{n+2} Q_{2n+2} + C_{n+2} Q_{2n+3}$	$C_{n+1} Q_{2n} + C_{n+2} Q_{2n+2}$	5 + 7
6	C_{n+1}	EI	$C_{n+1} I_{2n} + C_{n+1} I_{2n+1} + C_{n+2} I_{2n+2} + C_{n+2} I_{2n+3}$	$C_{n+1} I_{2n} + C_{n+2} I_{2n+2}$	6 + 8
7	C_{n+1}	OQ	$C_{n+1} Q_{2n} + C_{n+2} Q_{2n+1} + C_{n+2} Q_{2n+2} + C_{n+3} Q_{2n+3}$	$C_{n+1} Q_{2n+1} + C_{n+2} Q_{2n+3}$	5 + 11
8	C_{n+1}	OI	$C_{n+1} I_{2n} + C_{n+2} I_{2n+1} + C_{n+2} I_{2n+2} + C_{n+3} I_{2n+3}$	$C_{n+1} I_{2n+1} + C_{n+2} I_{2n+3}$	6 + 12
9	C_{n+2}	EQ	$C_{n+2} Q_{2n} + C_{n+2} Q_{2n+1} + C_{n+3} Q_{2n+2} + C_{n+3} Q_{2n+3}$	$C_{n+2} Q_{2n} + C_{n+3} Q_{2n+2}$	
10	C_{n+2}	EI	$C_{n+2} I_{2n} + C_{n+2} I_{2n+1} + C_{n+3} I_{2n+2} + C_{n+3} I_{2n+3}$	$C_{n+2} I_{2n} + C_{n+3} I_{2n+2}$	
11	C_{n+2}	OQ	$C_{n+2} Q_{2n} + C_{n+3} Q_{2n+1} + C_{n+3} Q_{2n+2} + C_{n+4} Q_{2n+3}$	$C_{n+2} Q_{2n+1} + C_{n+3} Q_{2n+3}$	
12	C_{n+2}	OI	$C_{n+2} I_{2n} + C_{n+3} I_{2n+1} + C_{n+3} I_{2n+2} + C_{n+4} I_{2n+3}$	$C_{n+2} I_{2n+1} + C_{n+3} I_{2n+3}$	

FIG. 10

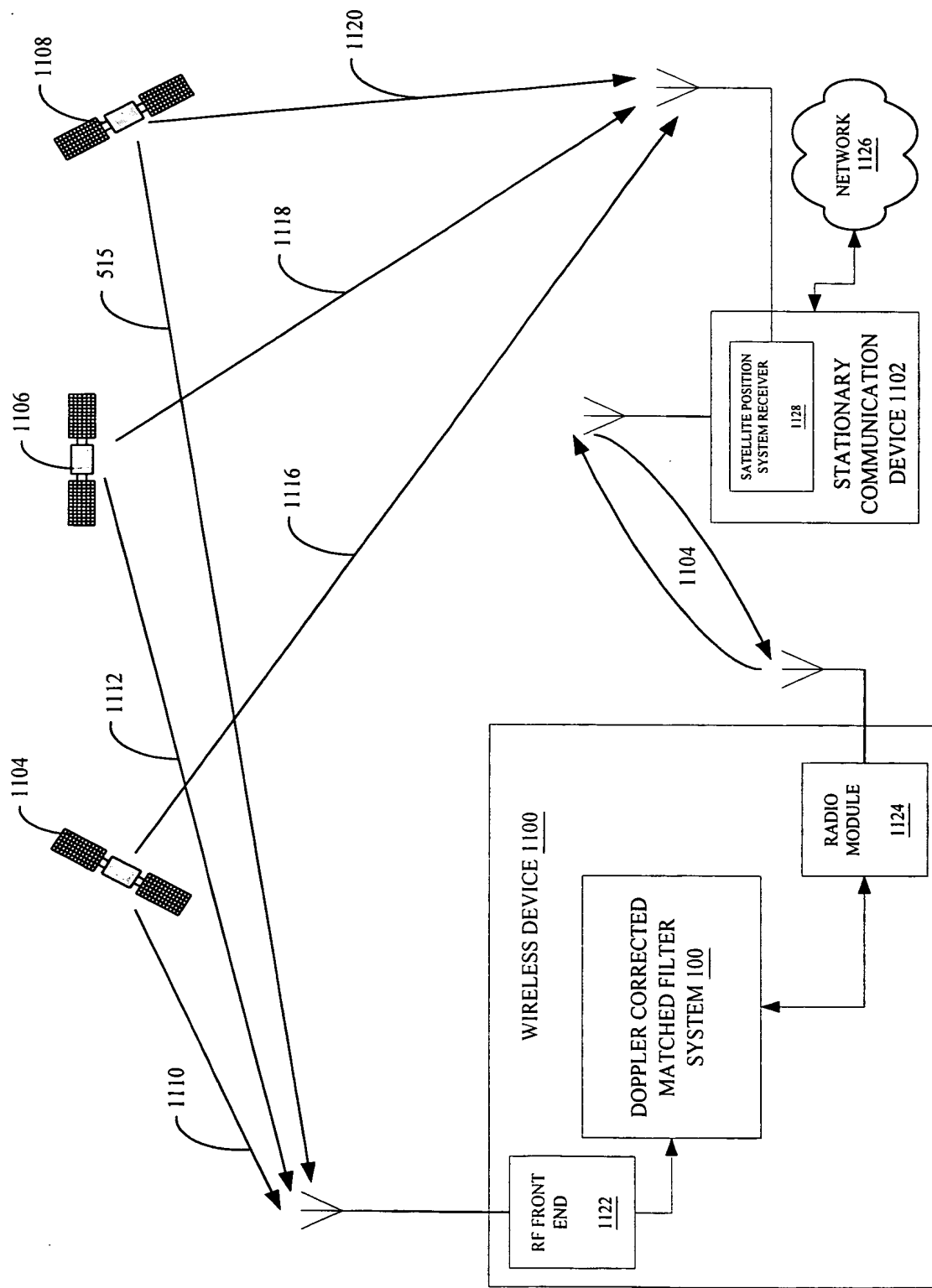


FIG. 11